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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,652		07/19/2001	Raymond Yinggang Xic	P-87/SYCS-036	3537
959	7590	09/09/2004		EXAMINER	
LAHIVE & COCKFIELD, LLP.				NGUYEN, QUYNH H	
28 STATE STREET BOSTON, MA 02109				ART UNIT	PAPER NUMBER
				2642	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.   Application No.   Applicant(s)	<u>`</u>	A - 1 - 4 - A1 -	Applicant(c)					
## Examiner   Quysh H Nguyen   2042    - The MAILING DATE of this communication appears on the cover sheet with the correspondence address  Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ② MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Balaxies of time may be availate under the provisions of 37 CFR 1.53(g). In no event, however, may a raply be sirally filed    If the provide may be availated under the provisions of 37 CFR 1.53(g). In no event, however, may a raply be sirally filed    If NO period for really is expected above, the maximum databatery prior to all publy and will explice \$1.50 (g) MoNTHS done to enabling sheet of his communication. Falliar to incorporate placets from the provisions of the control of the contro	•	Application No.						
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1) Responsive to communication(s) filed on 19 July 2001. 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims 4) ☐ Claim(s)	A SHORTENED STATUTORY PERIOD FO THE MAILING DATE OF THIS COMMUNIO  Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this community if the period for reply specified above is less than thirty (30).  If NO period for reply is specified above, the maximum stated in Failure to reply within the set or extended period for reply of Any reply received by the Office later than three months after a distance of the provided in the mailing in the set of the	CATION.  f 37 CFR 1.136(a). In no event, however, manication.  g days, a reply within the statutory minimum or utory period will apply and will expire SIX (6) will by statute, cause the application to become	ay a reply be timely filed of thirty (30) days will be considered time MONTHS from the mailing date of this of the ABANDONED (35 U.S.C. § 133).	ely. communication.				
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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma et al. (U.S. Patent 6,430,150).

Regarding claim 1, Azuma et al. teach the method in a telecommunication network wherein a failure occurs service is switched to the alternative paths (Abstract), the method including the steps of: determining whether a first connection can be established between the first node and the second node (Fig. 5A, between nodes 5 and 6); if the first connection cannot be established (failure), determining whether a second connection (a path connecting nodes 6, 2, 3, and 5) can be established between the first node (node 5) and a third node located after the second node (node 2) (Fig. 5A and col. 7, lines 20-32). Azuma et al. further teach when a secondary failure occurs, the plurality of alarm messages received successively by a node have different contents (col. 5, lines 45-54).

However, Azuma et al. do not detailing suggest if the first and second and third connections cannot be established, determining whether a fourth connection can be

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established between the fourth node located before the first node along the first connection path and the third node, and so on.

It would have been obvious to one of ordinary skill in the art at the time the invention was made that Azuma's system is a high-speed restoration system such that alternate path adapted quickly for restoring failures, and it would be easily expanded for establishing connections on k nodes.

Claim 2 is rejected for the same reasons as discussed above with respect to claim 1. Furthermore, Azuma et al. teach the third node is immediately after the first node (node 2 is after node 5) (Fig. 5A and col. 7, lines 20-32).

Regarding claims 3, 5, 7, 9, and 11, Azuma et al. teach attempting to determine non-retracing connections. For example, a path connecting nodes 6, 2, 3, and 5 (Fig. 5A and col. 7, lines 20-32).

Regarding claims 4 and 10, Azuma et al. teach establishing a second connection path including the first connection path (col. 7, line 20-25). However, Azuma et al. do not specifically suggest establishing a second connection path including one of the group of the first connection, the second connection, the third connection and the fourth connection; propagating path information corresponding to the second connection path for a plurality of nodes in the network related to the second connection path. Again, this would have been obviously rejected for the same reasons as discussed above with respect to claim 1.

Claim 6 is rejected for the same reasons as discussed above with respect to claim 1.

Claim 8 is rejected for the same reasons as discussed above with respect to claim 6. Furthermore, Azuma et al. do not explicitly teach if the first connection can be established, restoring the connection C by establishing a connection between the node Nk and Nk+1. Obviously, if the first connection can be established from restoring, then establishing a connection between the nodes that are involved previously.

Regarding claims 12-15 and 17-20, Azuma et al. teach a processor, a memory in communication with the processor, a network interface in communication with the processor (Fig. 9 and col. 10, line 54 through col. 11, line3).

Regarding claims 16 and 21, Azuma et al. the apparatus is provided at each node of the network (Fig. 1A-2A 4A-5B).

## Conclusion

- 3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ash et al. (U.S. Patent 4,669,113) teach integrated network controller for a dynamic nonhierarchical routing switching network.
- 4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quynh H. Nguyen whose telephone number is 703-305-5451. The examiner can normally be reached on Monday Thursday from 6:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on (703) 305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

qhn

Quynh H. Nguyen September 7, 2004

> JACK CHIANG PBIMARY EXAMINE